

CLAIMS

I claim:

1. In an apparatus, a method of requesting resource authorization comprising:
transmitting one or more PDP context requests including binding information for
5 one or more IP media flows of a session, wherein the binding information includes an
authorization token and one or more IP media flow identifiers.
2. The method of claim 1 wherein the one or more IP media flow identifiers
combine with the authorization token to identify the one or more IP media flows.
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3. The method of claim 1 wherein the apparatus is user equipment, and
wherein the one or more IP media flow identifiers reference a flow order in a SDP
description that is accessible to the user equipment and a P-CSCF/PCF.
- 15 4. The method of claim 1 wherein each PDP context request is a PDP context
activation request or a PDP context modification request.
5. A computer-readable medium having encoded therein computer-executable
instructions for causing a computer programmed thereby to perform the method of
20 claim 1.
6. In a network node, a method of authorizing resources comprising:
processing binding information for one or more IP media flows of a session,
wherein the binding information includes an authorization token and one or more IP
25 media flow identifiers.
7. The method of claim 6 wherein the one or more IP media flow identifiers
combine with the authorization token to identify the one or more IP media flows.
- 30 8. The method of claim 6 wherein the network node comprises a P-CSCF/PCF,
and wherein the one or more IP media flow identifiers reference a flow order in a SDP
description that is accessible to the P-CSCF/PCF and user equipment.

9. The method of claim 6 wherein the processing comprises authorizing the one or more IP media flows according to a service-based local policy decision.

5 10. A computer-readable medium having encoded therein computer-executable instructions for causing a computer programmed thereby to perform the method of claim 6.

10 11. A computer-readable medium having encoded therein computer-executable instructions for causing user equipment programmed thereby to perform a method of requesting resource authorization and allocation, the method comprising:
 receiving a media authorization token; and
 transmitting a context activation request including the media authorization token
15 for authorizing each of one or more media flows of a session, wherein the media authorization token in combination with a media flow identifier from among plural media flow identifiers is sufficient to uniquely identify a media flow from among plural media flows of the session.

20 12. The computer-readable medium of claim 11 wherein the plural media flow identifiers reference a flow order in a session description, and wherein a gateway node authorizes the one or more media flows according to a service-based local policy decision.

25 13. The computer-readable medium of claim 11 wherein the method further comprises:
 receiving a second media authorization token; and
 transmitting a context modification request including the second media authorization token for modifying authorization of the one or more media flows.

30 14. A computer-readable medium having encoded therein computer-executable instructions for causing a network node programmed thereby to perform a method of authorizing and allocating resources, the method comprising:

receiving a context request including a media authorization token for authorizing each of one or more media flows of a session, wherein the media authorization token in combination with a media flow identifier from among plural media flow identifiers is sufficient to uniquely identify a media flow from among plural media flows of the session; and
requesting policy information indicated by the media authorization token.

15. The computer-readable medium of claim 14 wherein the plural media flow identifiers reference a flow order in a session description.

16. The computer-readable medium of claim 14 wherein the method further comprises:

authorizing the one or more media flows according to a service-based local policy decision.

17. A computer-readable medium having encoded therein computer-executable instructions for causing user equipment programmed thereby to perform a method of requesting resource authorization and allocation for one or more packet media flows of a session, the method comprising:

receiving an authorization token and packet media flow information during session protocol signaling, the packet media flow information accessible to a network node and the user equipment; and

transmitting one or more messages including binding information for authorizing one or more packet media flows of a session, wherein the binding information includes the authorization token, whereby each of one or more packet media flow identifiers is interpreted relative to the authorization token to identify a packet media flow of the session.

18. The computer-readable medium of claim 17 wherein the user equipment is a cellular device, wherein the network node comprises a GGSN, and wherein each of the one or more messages is a PDP context activation or modification request.

19. The computer-readable medium of claim 17 wherein the one or more packet media flows are IP media flows.

5 20. The computer-readable medium of claim 17 wherein a SDP description comprises the packet media flow information, and wherein the one or more packet media flow identifiers reference a media order in the SDP description.

10 21. The computer-readable medium of claim 17 wherein the session protocol is SIP, and wherein a PCF of a P-CSCF generates the authorization token.

22. The computer-readable medium of claim 17 wherein the user equipment transmits a single message to request resource authorization and allocation for all packet media flows of the session.

15 23. A computer-readable medium having encoded therein computer-executable instructions for causing a network node programmed thereby to perform a method of authorizing and allocating resources for one or more packet media flows of a session, the method comprising:

20 transmitting an authorization token and packet media flow information during session protocol signaling, the packet media flow information accessible to the network node and user equipment;

25 processing one or more messages including binding information for authorizing one or more packet media flows of a session, wherein the binding information includes the authorization token, and wherein the processing includes interpreting each of one or more packet media flow identifiers relative to the authorization token to identify a packet media flow of the session.

30 24. The computer-readable medium of claim 23 wherein the user equipment is a cellular device, wherein the network node comprises a GGSN, and wherein the one or more packet media flows are IP media flows.

25. The computer-readable medium of claim 23 wherein a SDP description comprises the packet media flow information, and wherein the one or more packet media flow identifiers reference a media order in the SDP description.

5 26. The computer-readable medium of claim 23 wherein the session protocol is SIP, and wherein a PCF of a P-CSCF generates the authorization token.

10 27. The computer-readable medium of claim 23 wherein the network node processes a single message requesting resource authorization and allocation for all packet media flows of the session.

 28. The computer-readable medium of claim 23 wherein the method further comprises:

 requesting policy information indicated by the authorization token.